



Year 1

VB SC 050S(3)	First Year Seminar: Mechanisms of Disease	FALL AT UNIVERSITY PARK ONLY (<i>or other First Year Seminar</i>)
BIOL 110 GN(4)	Biology: Basic Concepts and Biodiversity**	FALL ONLY (AT UNIVERSITY PARK)
CHEM 110 GN(3)	Chemical Principles I**	
CHEM 111 GN(1)	Experimental Chemistry I**	
MATH 140 GQ(4)	Calculus with Analytic Geometry I**	

BIOL 220W GN(4)	Biology: Populations and Communities	SPRING ONLY (AT UNIVERSITY PARK)
CHEM 112 GN(3)	Chemical Principles II**	
CHEM 113 GN(1)	Experimental Chemistry II**	
MATH 141 GQ(4)	Calculus with Analytic Geometry II**	

Year 2

BIOL 230W GN(4)	Biology: Molecules and Cells*	FALL ONLY (AT UNIVERSITY PARK)
CHEM 210(3)	Organic Chemistry I	
PHYS 250 GN(4)	Introductory Physics I	

VB SC 211(3)	The Immune System and Disease*	SPRING AT UNIVERSITY PARK ONLY
CHEM 212(3)	Organic Chemistry II	
CHEM 213(2)	Laboratory in Organic Chemistry	
PHYS 251 GN(4)	Introductory Physics II	
STAT 250 GQ(3)	Introduction to Biostatistics	— <i>or</i> — STAT 200 GQ(4) Elementary Statistics STAT 240 GQ(3) Introduction to Biometry

Year 3

B M B 401(3)	General Biochemistry
MICRB 201(3)	Introductory Microbiology
MICRB 202(2)	Introductory Microbiology Laboratory
MICRB 410(3)	Principles of Immunology*

B M B 402(3) General Biochemistry

Choose **epidemiology option**. *Select 3 credits from:*

{	VB SC 444(3)	Epidemiology of Infectious Diseases*	SPRING AT UNIVERSITY PARK ONLY
	BIOL 412(3)	Ecology of Infectious Diseases*	FALL AT UNIVERSITY PARK ONLY
	BIOL 497A(3)	Evolution of Infectious Diseases*	SPRING AT UNIVERSITY PARK ONLY

Year 4

VB SC 435(2)	Viral Pathogenesis*	FALL AT UNIVERSITY PARK ONLY
VB SC 418(2)	Bacterial Pathogenesis*	SPRING AT UNIVERSITY PARK ONLY
VB SC 432(3)	Advanced Immunology: Signaling in the Immune System*	SPRING AT UNIVERSITY PARK ONLY
VB SC 448W(3)	Current Topics in Immunology*	SPRING AT UNIVERSITY PARK ONLY

Choose **supporting courses**. *Select 9 credits; requires a grade of C or better. Check schedule of courses for semester availability.*

AN SC 413(3)	Transgenic Biology	MICRB 401(3)	Microbial Physiology and Structure
BB H 440(3)	Principles of Epidemiology	MICRB 412(3)	Medical Microbiology
BIOL 411(3)	Medical Embryology	MICRB 415(3)	General Virology: Bacterial & Animal Viruses
BIOL 416(3)	Biology of Cancer	MICRB 422(2)	Medical Microbiology Laboratory
BIOL 430(3)	Developmental Biology	MICRB 447(1)	Laboratory in Molecular Immunology
BIOL 437(4)	Histology	VB SC 402(3)	Biology of Animal Parasites
BIOL 460(3)	Human Genetics	VB SC 405(3)	Laboratory Animal Science
BIOL 472(3)	Mammalian Physiology (<i>or AN SC 423</i>)	VB SC 420(3)	General Animal Pathology
B M B 400(3)	Molecular Biology of the Gene	VB SC 421(4)	Comparative Vertebrate Anatomy
B M B 450(2)	Microbial/Molecular Genetics	VB SC 425(3)	Principles of Avian Diseases
B M B 460(2)	Cell Growth and Differentiation	VB SC 430(3)	Principles of Toxicology
B M B 464(3)	Molecular Medicine	VB SC 433(3)	Molecular and Cellular Toxicology
B M B 480(3)	Tumor Viruses and Oncogenes	VB SC 489(3)	Animal Cell Culture Methods
E R M 431(3)	Environmental Toxicology	VB SC 451(3)	Immunotoxicology of Drugs and Chemicals

Other **400 level courses** (*not including 496 research credit*) may fulfill this requirement by approval. Consult with the Program Coordinator.

* *requires a grade of C or better for graduation*

** *requires a grade of C or better for entrance to major*

Immunology & Infectious Disease

checksheet

VB SC 050S(3)	<i>or other First-Year Seminar</i>
ENGL 015 GWS(3)	Rhetoric and Composition
ENGL 202C GWS(3)	Effective Writing: Technical Writing
CAS 100 GWS(3)	Effective Speech
	GH selection*
	GH selection*
	GA selection*
	GA selection*
	GS selection*
ECON 002 GS(3) ECON 004 GS(3) ECON 014 GS(3) AG BM 101 GS(3)	Economics selection. <i>Choose one.</i> Counts as GS. Introductory Microeconomic Analysis and Policy Introductory Macroeconomic Analysis and Policy Principles of Economics Economic Principles of Agribusiness Decision Making
	GHA selection**
	GHA selection**
BIOL 110 GN(4)	Biology: Basic Concepts and Biodiversity***
BIOL 220W GN(4)	Biology: Populations and Communities
BIOL 230W GN(4)	Biology: Molecules and Cells***
MATH 140 GQ(4)	Calculus with Analytic Geometry I***
MATH 141 GQ(4)	Calculus with Analytic Geometry II***
STAT 200 GQ(4) STAT 240 GQ(3) STAT 250 GQ(3)	Statistics or biometry selection. <i>Choose one.</i> Elementary Statistics Introduction to Biometry Introduction to Biostatistics
PHYS 250 GN(4)	Introductory Physics I
PHYS 251 GN(4)	Introductory Physics II
CHEM 110 GN(3)	Chemical Principles I***
CHEM 111 GN(1)	Experimental Chemistry I***
CHEM 112 GN(3)	Chemical Principles II***
CHEM 113 GN(1)	Experimental Chemistry II***
CHEM 210(3)	Organic Chemistry I
CHEM 212(3)	Organic Chemistry II
CHEM 213(2)	Laboratory in Organic Chemistry
MICRB 201(3)	Introductory Microbiology
MICRB 202(2)	Introductory Microbiology Laboratory
VB SC 211(3)	The Immune System and Disease ***
B M B 401(3)	General Biochemistry
B M B 402(3)	General Biochemistry
MICRB 410(3)	Principles of Immunology***
VB SC 444(3) BIOL 412(3) BIOL 497A(3)	Epidemiology selections. <i>Choose one:</i> Epidemiology of Infectious Diseases*** Ecology of Infectious Diseases*** Evolution of Infectious Diseases***
VB SC 418(2)	Bacterial Pathogenesis***
VB SC 432(3)	Advanced Immunology: Signaling***
VB SC 435(2)	Viral Pathogenesis***
VB SC 448W(3)	Current Topics in Immunology***
	Supporting course#
	Supporting course#
	Supporting course#
	Elective##
	Elective##

* A total of 18 credits of GH/GA/GS (humanities, arts, behavioral and social sciences) is required, which can be distributed 6/6/6 or 3/6/9 to each category. However, 3 credits of GS must be an economics selection.

** A total of 3 credits of GHA (health and physical activity) is required. Most GHA courses are 1.5 credits.

*** A grade of C or better is required for these courses.

Supporting courses must be 400 level courses from the approved list or by permission of the Program Coordinator.

A total of 124 credits is required for graduation. Depending on selections, an additional 4–6 credits will be required to reach this total.